# Functional Requirement

2. Functional Requirements  
All functional requirements are written in active voice, concise, unambiguous, and verifiable.  
  
ID Requirement Description Input Output  
FR-001 The system shall allow users to create an account by providing valid personal information. Name, Email, Password, Confirm Password Account created or error message if invalid input.  
FR-002 The system shall authenticate users during login using their registered email and password. Email, Password Login success or failure message.  
FR-003 The system shall enable users to log out securely. N/A Session terminated.  
FR-004 The system shall allow users to view a list of available products categorized by type. N/A Displayed product list with images, prices, and descriptions.  
FR-005 The system shall allow users to add selected products to their shopping cart. Product ID, Quantity Updated cart contents.  
FR-006 The system shall display the total quantity and cost of items in the shopping cart. N/A Cart summary displayed on screen.  
FR-007 The system shall allow users to modify the quantity or remove items from the shopping cart. Product ID, New Quantity / Remove Command Updated cart contents.  
FR-008 The system shall process checkout by collecting shipping and payment details. Shipping Address, Payment Method, Card Details Confirmation of successful transaction.  
FR-009 The system shall send an order confirmation email to the customer after checkout. Order ID, Customer Email Email sent with order details.  
FR-010 The system shall allow administrators to manage product inventory, including adding, editing, and removing products. Product Data (Name, Price, Description, Image, Category) Updated product catalog.  
FR-011 The system shall support plugin development via an API that allows external developers to extend system functionality. Plugin code, co